Final

Water Supply Well Report for Pelham Range

Fort McClellan
Calhoun County, Alabama

Prepared for:

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Prepared by:

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Revision 1

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List of Acronyms

EPA	U.S. Environmental Protection Agency
FTMC	Fort McClellan
IT	IT Corporation
mg/L	milligrams per liter
MOA	Memorandum of Agreement
NTU	nephelometric turbidity unit
SAIC	Science Applications International Corporation
SAP	installation-wide sampling and analysis plan
Shaw	Shaw Environmental, Inc.
SOTS	Security Operations Test Site
SSSL	site-specific screening level
SVOC	semivolatile organic compound
TAL	target analyte list
USACE	U.S. Army Corps of Engineers
UTES	Unit Training and Equipment Site
VOC	volatile organic compound

1.0 Introduction

This report summarizes the methodology, results, and conclusions for the sampling of four water supply wells at Pelham Range in Calhoun County, Alabama. These water supply wells were sampled by Shaw Environmental, Inc. (Shaw) (formerly IT Corporation [IT]) to meet requirements specified in a memorandum of agreement (MOA) between the U.S. Army and the Alabama Army National Guard. The water supply wells are located at the following facilities/areas within Pelham Range:

- Security Operations Test Site (SOTS)
- SOTS Administration Building 8203
- Rideout Hall Building 8801
- Range 57.

In addition, a fifth water supply well was located at the Unit Training and Equipment Site (UTES); however, it was not sampled because it had been previously abandoned.

Pelham Range is approximately 22,245 acres in size and is located 5 miles west of the Main Post of Fort McClellan (FTMC). Pelham Range adjoins the Anniston Army Depot along its southern boundary (Figure 1). Pelham Range is an active training area used for artillery firing, smoke operations training, and field training exercises. The purpose of this report is to assess whether activities at Pelham Range have affected the water supply wells. The locations of the water supply wells are shown on Figure 2.

2.0 Methodology

This section summarizes the activities conducted by Shaw at the water supply wells sampled at Pelham Range (Figure 2).

2.1 Sample Collection

Each of the four wells sampled at Pelham Range were equipped with a dedicated submersible pump and an in-line potassium hypochlorite system. Before purging each well, the in-line potassium hypochlorite system was disconnected. Water levels in the water supply wells were not measured because of their protective well heads and dedicated pumps; therefore, calculations could not be made to estimate the well casing volume. Therefore, the wells were purged for an additional 30 minutes after stabilization of the water temperature, pH, specific conductivity, dissolved oxygen, and turbidity. After the additional purge time elapsed, the wells were

dbomar 05/19/03	STARTING DATE: 12/14/00	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. REMO	DWG. NO.: \774645es.692
c:\cadd\design\774645es.692 10:24:49 AM	DRAWN BY: D. BOMAR	DRAWN BY:	ENGR. CHCK. BY: S. MORAN	PROJ. MGR.: J. YACOUB	PROJ. NO.: 774645

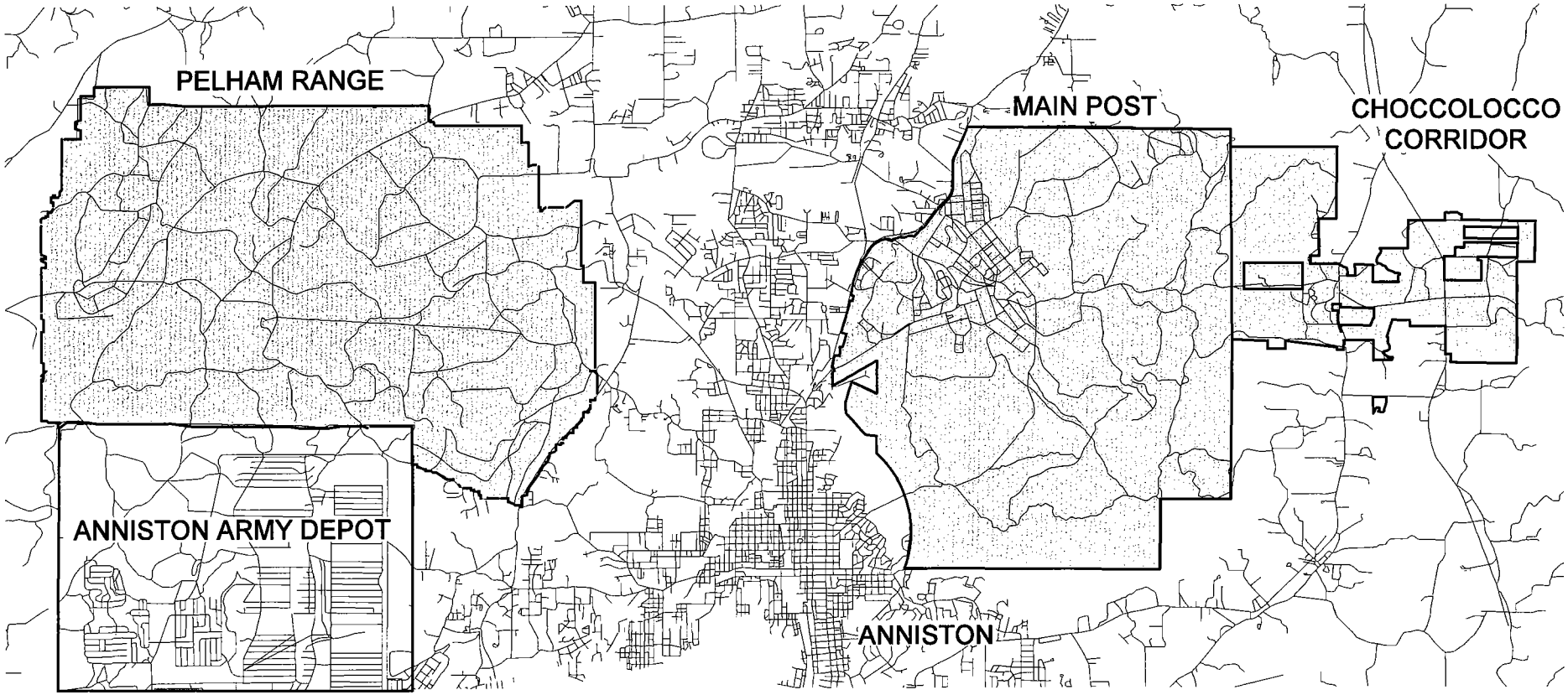

FIGURE 1
VICINITY MAP

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

SCALE
0 12000 24000 FEET

Shaw™ Shaw Environmental, Inc.

dbomar	05/20/03	STARTING DATE: 12/14/00	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. REMO	DWG. NO.: \774645es.693
c:\codd\design\774645es.693	01:48:04 PM	DRAWN BY: D. BOMAR	DRAWN BY:	ENGR. CHCK. BY: S. MORAN	PROJ. MGR.: J. YACOUB	PROJ. NO.: 774645

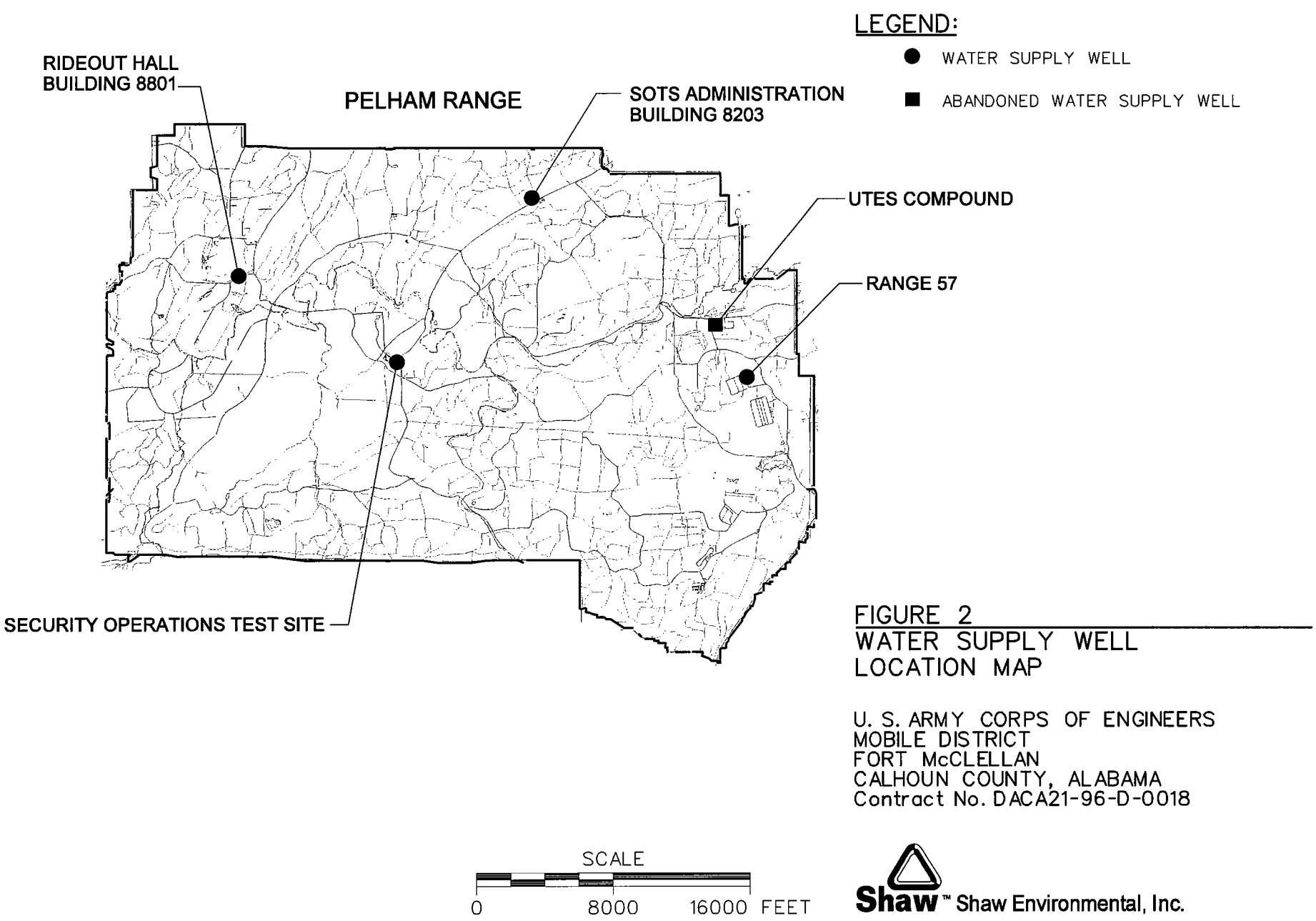

FIGURE 2
WATER SUPPLY WELL
LOCATION MAP

U. S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA
Contract No. DACA21-96-D-0018

Shaw™ Shaw Environmental, Inc.

sampled. The Rideout Hall water supply well was not sampled in this manner because well went dry after 68 gallons were purged. The well was then allowed to recharge for approximately 45 minutes prior to sampling.

Finding suitable points at which to sample these water supply wells was problematic. The well at Range 57 and the well at SOTS Administrative Building 8203 were sampled using the existing garden hose that was connected to a water spigot near the wellhead. The sample from the Rideout Hall water supply well was collected via a spigot located outside of the well house. The sample from the SOTS water supply well was collected from a kitchen faucet inside the facility because no other location was accessible for sampling. Appendix A contains the sample collection logs and chain-of-custody records.

The water supply well at the SOTS facility was resampled in February 2003 because the initial sample was turbid. Prior to sampling, the dedicated well pump was removed and the well was developed using a submersible pump in accordance with methodology outlined in the SAP (IT, 2002; IT, 2000a). The well development log is included in Appendix B. The sample was collected using a submersible pump following procedures presented in the SAP. Water quality parameters were recorded prior to sample collection, as summarized in Table 1.

2.2 Surveying of Well Locations

The well locations were surveyed using global positioning system survey techniques and conventional civil survey techniques described in the SAP. Horizontal coordinates were referenced to the U.S. State Plane Coordinate System, Alabama East Zone, North American Datum of 1983. Horizontal coordinates are included in Appendix C.

2.3 Analytical Program

Groundwater samples collected during this investigation were analyzed for various chemical parameters based on the site-specific chemicals potentially used at Pelham Range. With the exception of the SOTS well resample, the samples were analyzed for the following parameters using EPA SW-846 methods, including Update III methods where applicable:

- Target compound list volatile organic compounds (VOC) – EPA Method 8260B
- Target compound list semivolatile organic compounds (SVOC) – EPA Method 8270C

Table 1

Groundwater Field Parameters
Water Supply Wells at Pelham Range
Fort McClellan, Calhoun County, Alabama

Well Location	Sample Date	Specific Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	Temperature (°C)	Turbidity (NTU)	pH (SU)
WSW-Rideout	17-Oct-00	0.150	7.60	18.5	63	7.11
WSW-RNG-57	17-Oct-00	0.160	9.70	17.0	0	7.54
WSW-SOTS-ADM	17-Oct-00	0.175	4.57	20.0	0	7.66
WSW-FMR-SOTS	18-Oct-00	0.231	9.92	18.8	344	6.80
	13-Feb-03	0.321	4.23	18.1	5.1	6.79

°C - Degrees Celsius.
mg/L - Milligrams per liter.
mS/cm - Millisiemens per centimeter.
NTU - Nephelometric turbidity units.
SU - Standard units.
WSW-Rideout - Water supply well at Rideout Hall, Building 8801.
WSW-RNG-57 - Water supply well at Range 57.
WSW-SOTS-ADM - Water supply well at SOTS Administration Building, Building 8203.
WSW-FMR-SOTS - Water supply well at former SOTS facility (actual test site).

- Target analyte list (TAL) metals – EPA Methods 6010B/7470A
- Nitroaromatic and nitramine explosives – EPA Method 8330.

The resample from the SOTS water supply well was analyzed for TAL metals only.

Analytical data were reported and evaluated in accordance with Corps of Engineers South Atlantic Savannah Level B criteria (USACE, 1994) and the stipulated requirements for the generation of definitive data presented in the SAP. Chemical data were reported via hard-copy data packages by the laboratory using Contract Laboratory Program-like forms. These packages were validated in accordance with EPA National Functional Guidelines by Level III criteria. A summary of validated data is included in Appendix D.

2.4 Sample Preservation, Packaging, and Shipping

Sample preservation, packaging, and shipping followed requirements specified in the SAP. Sample containers, sample volumes, preservatives, and holding times for the analyses performed in this investigation are listed in the SAP. Sample documentation and chain-of-custody records were recorded as specified in the SAP.

Completed analysis request and chain-of-custody records (Appendix A) were included with each shipment of samples to EMAX Laboratories, Inc. in Torrance, California.

3.0 Summary of Analytical Results

The results of chemical analysis of the groundwater samples collected from the water supply wells at Pelham Range indicate that metals, VOCs, and SVOCs were detected in the samples. Explosive compounds were not detected in any of the samples. To evaluate whether the detected constituents present an unacceptable risk to human health, the analytical results were compared to the residential human health site-specific screening levels (SSSL) for FTMC. The SSSLs were developed by Shaw for human health risk evaluations as part of the ongoing site investigations being performed under the Base Realignment and Closure Environmental Restoration Program at FTMC (IT, 2000b).

Metals results exceeding SSSLs were subsequently compared to background screening values to determine if the metals concentrations were within natural background concentrations (Science Applications International Corporation [SAIC], 1998). Table 2 summarizes the results of the comparison of detected constituents to the SSSLs and background screening values. Complete analytical results are presented in Appendix D.

Table 2

Groundwater Analytical Results
Water Supply Wells at Pelham Range
Fort McClellan, Calhoun County, Alabama

Well Location				Rideout Hall				Range 57				Administration Building 8203				Security Operations Test Site				Security Operations Test Site			
Sample Location Code				WSW-RIDEOUT				WSW-RNG-57				WSW-SOTS-ADM				WSW-FMR-SOTS				WSW-FMR-SOTS			
Sample Number				XQ3003				XQ3001				XQ3002				XQ3005				XQ3024			
Sample Date				17-Oct-00				17-Oct-00				17-Oct-00				18-Oct-00				13-Feb-03			
Parameter	Units	BKG[a]	SSSL[b]	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL	Result	Qual	>BKG	>SSSL
METALS																							
Aluminum	mg/L	2.34E+00	1.56E+00	ND				ND				ND				8.87E-02	J			ND			
Arsenic	mg/L	1.78E-02	4.46E-05	ND				ND				ND				4.53E-01		YES	YES	1.18E-02			YES
Barium	mg/L	1.27E-01	1.10E-01	4.51E-01		YES	YES	6.03E-03	J			5.02E-03	J			5.65E-02				3.13E-02			
Calcium	mg/L	5.65E+01	NA	3.21E+01				3.17E+01				3.27E+01				3.62E+01				4.21E+01			
Copper	mg/L	2.55E-02	6.26E-02	8.00E-03	J			ND				7.34E-03	J			1.57E-01		YES	YES	ND			
Iron	mg/L	7.04E+00	4.69E-01	5.70E+00			YES	3.50E-02	J			1.72E-02	J			2.55E+01		YES	YES	5.82E-01	J		YES
Lead	mg/L	8.00E-03	1.50E-02	ND				9.67E-03	B	YES		6.91E-03	B			8.56E-03	B	YES		ND			
Magnesium	mg/L	2.13E+01	NA	9.96E+00				1.93E+01				2.00E+01				2.35E+01		YES		2.00E+01			
Manganese	mg/L	5.81E-01	7.35E-02	4.28E-01			YES	ND				ND				4.14E-01			YES	7.33E-02	J		
Nickel	mg/L	NA	3.13E-02	1.06E-02	J			ND				ND				ND				ND			
Potassium	mg/L	7.20E+00	NA	ND				ND				ND				ND				7.89E-01	B		
Sodium	mg/L	1.48E+01	NA	7.53E+00				1.12E+00				8.93E-01	J			1.80E+00				8.81E-01	J		
Thallium	mg/L	1.46E-03	1.02E-04	ND				ND				6.14E-03	J	YES	YES	ND				ND			
Zinc	mg/L	2.20E-01	4.69E-01	7.31E-01		YES	YES	1.07E-02	B			4.33E-01		YES		7.81E-01		YES	YES	4.09E-02	J		
VOLATILE ORGANIC COMPOUNDS																							
Chloroform	mg/L	NA	1.15E-03	ND				ND				ND				1.30E-03	J		YES	NR			
SEMIVOLATILE ORGANIC COMPOUNDS																							
Bis(2-Ethylhexyl)phthalate	mg/L	NA	4.31E-03	ND				4.80E-03	J		YES	ND				ND				NR			

Analyses performed using U.S. Environmental Protection Agency (EPA) SW-846 analytical methods.

[a] BKG - Background. Concentration listed is two times (2x) the arithmetic mean of background metals concentration given in SAIC, 1998, *Final Background Metals Survey Report, Fort McClellan, Alabama* , July.

[b] Residential human health site-specific screening level (SSSL) as given in IT, 2000, *Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama* , July.

B - Analyte detected in laboratory or field blank at concentration greater than the reporting limit.

J - Compound was positively identified; reported value is an estimated concentration.

mg/L - Milligrams per liter.

NA - Not available.

ND - Not detected.

NR - Not requested.

Qual - Data validation qualifier.

3.1 Security Operations Test Site

Metals. Eleven metals were detected in the initial groundwater sample collected from the SOTS water supply well. The concentrations of four metals (arsenic, copper, iron, and zinc) exceeded their respective SSSLs and background concentrations.

It should be noted that the original groundwater sample collected from the SOTS water supply well had high turbidity (344 nephelometric turbidity units [NTU]) at the time of sample collection. Therefore, the well was resampled (for metals analysis only) on February 13, 2003, following thorough well development and the use of a reduced flow sample method that resulted in much lower sample turbidity (5.1 NTU, see Table 1). The resample results indicate that only two metals (arsenic and iron) exceeded SSSLs. The arsenic and iron results, however, were below their respective background values.

VOCs. Chloroform was the only VOC detected in the sample from the SOTS water supply well. The analytical result was flagged with a "J" data qualifier indicating that the compound was positively identified but the concentration was estimated. The chloroform concentration (0.0013 milligrams per liter [mg/L]) marginally exceeded its SSSL (0.00115 mg/L).

SVOCs. SVOCs were not detected in the groundwater sample from the SOTS water supply well.

Explosives. Explosive compounds were not detected in the groundwater sample collected from the SOTS water supply well.

3.2 Rideout Hall Building 8801

Metals. Nine metals were detected in the groundwater sample collected from the Rideout Hall Building 8801 water supply well. The concentrations of two metals (barium and zinc) exceeded their respective SSSLs and background concentrations. This sample was also moderately turbid (63 NTU) at the time of sample collection, which likely caused the elevated metals results.

VOCs. VOCs were not detected in the groundwater sample collected from the Rideout Hall Building 8801 water supply well.

SVOCs. SVOCs were not detected in the groundwater sample collected from the Rideout Hall Building 8801 water supply well.

Explosives. Explosive compounds were not detected in the groundwater sample collected from the Rideout Hall Building 8801 water supply well.

3.3 Range 57

Metals. Seven metals were detected in the groundwater sample collected from the Range 57 water supply well. The metals concentrations in the sample were below their respective SSSLs.

VOCs. VOCs were not detected in the groundwater sample collected from the Range 57 water supply well.

SVOCs. Bis(2-ethylhexyl)phthalate was the only SVOC detected in the groundwater sample collected from the Range 57 water supply well. The analytical result was flagged with a "J" data qualifier, indicating that the compound was positively identified but the concentration was estimated. Bis(2-ethylhexyl)phthalate is a common sample contaminant. The bis(2-ethylhexyl)phthalate concentration (0.0048 mg/L) marginally exceeded its SSSL (0.0043 mg/L).

Explosives. Explosive compounds were not detected in the groundwater sample collected from the Range 57 water supply well.

3.4 SOTS Administration Building 8203

Metals. Nine metals were detected in the groundwater sample collected from the SOTS Administration Building 8203 water supply well. Only one metal (thallium) was detected at a concentration exceeding its SSSL. The thallium result (0.0061 mg/L) also exceeded its background value (0.0015 mg/L); however, the analytical result was flagged with a "J" data qualifier, indicating that the concentration was estimated.

VOCs. VOCs were not detected in the groundwater sample collected from the SOTS Administration Building 8203 water supply well.

SVOCs. SVOCs were not detected in the groundwater sample collected from the SOTS Administration Building 8203 water supply well.

Explosives. Explosive compounds were not detected in the groundwater sample collected from the SOTS Administration Building 8203 water supply well.

4.0 Summary and Conclusions

The concentrations of six metals (arsenic, barium, copper, iron, thallium, and zinc) exceeded their respective SSSLs and background concentrations in the Pelham Range water supply well groundwater samples. Thallium was present in the sample from the SOTS Administration Building 8203 well. The remainder of the metals were present in two samples (SOTS and Rideout Hall) that were turbid at the time of sample collection. Resampling of the SOTS well confirmed that the initial elevated metals results were caused by high sample turbidity.

Chloroform was detected in the sample from the SOTS water supply well at a concentration (0.0013 mg/L) marginally exceeding its SSSL (0.00115 mg/L). Although a drinking water standard for chloroform (trichloromethane) is not available, the chloroform concentration was well below the EPA drinking water standard of 0.08 mg/L for total trihalomethanes. VOCs were not detected in any of the other water supply wells sampled.

Bis(2-ethylhexyl)phthalate was detected in the sample from the Range 57 water supply well at a concentration (0.0048 mg/L) marginally exceeding its SSSL (0.0043 mg/L). However, bis(2-ethylhexyl)phthalate is a common contaminant in water samples. The compound may have also originated from the garden hose used in sampling. Consequently, bis(2-ethylhexyl)phthalate is not considered to be a site-related contaminant. SVOCs were not detected in any of the other water supply wells sampled.

Based on the groundwater sample results from the water supply wells at Pelham Range, past operations at the range have not adversely impacted these wells. Therefore, Shaw recommends no further action be taken pertaining to the water supply wells at Pelham Range.

5.0 References

IT Corporation (IT), 2002, ***Draft Installation-Wide Sampling and Analysis Plan, Fort McClellan, Calhoun County, Alabama***, Revision 3, February.

IT Corporation (IT), 2000a, ***Final Installation-Wide Sampling and Analysis Plan, Fort McClellan, Calhoun County, Alabama***, March.

IT Corporation (IT), 2000b, ***Final Human Health and Ecological Screening Values and PAH Background Summary Report, Fort McClellan, Calhoun County, Alabama***, July.

Science Applications International Corporation (SAIC), 1998, ***Final Background Metals Survey Report, Fort McClellan, Alabama***, July.

U.S. Army Corps of Engineers (USACE), 1994, ***Requirements for the Preparation of Sampling and Analysis Plans***, Engineer Manual EM 200-1-3, September.

APPENDIX A

SAMPLE COLLECTION LOGS AND ANALYSIS REQUEST/CHAIN-OF-CUSTODY RECORDS

SAMPLE COLLECTION LOGS

ENTERED BY SHIRLEY

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: Fort McClellan, SAD TERC
Manager: Jeanne Yacoub

Site: WSW-RN6-57
Location Code:
Sample Number:
Sample Name: XQ3001
Sampling Method: Dedicated well pump

RFA/COC Number: WSW-RN657
Collection Date: ~~10/16/93~~ 10/17/00
Collection Time: 1105
Start Depth: NA
End Depth: NA

Sample Team: T. Brom
T. Price

Check	Analytical Suite	Qty	Size	Units	Type	~~TCLP (Y/N)~~ TB
✓	Volatiles	3	40	mL	VOA Vial	
✓	Semivolatiles	1	1	L	Amb. Glass	
✓	Metals	1	1	L	HDPE	
	PCBs	1	1	L	Amb. Glass	
	Cl Pesticides	1	1	L	Amb. Glass	
	Cl Herbicides	1	1	L	Amb. Glass	
	OP Pesticides	1	1	L	Amb. Glass	
	Reactive Cyanid	1	1	L	Amb. Glass	
	Reactive Sulfid	1	1	L	Amb. Glass	
	pH	1	1	L	Amb. Glass	
	Flashpoint	1	1	L	Amb. Glass	
✓	Other: Nitroexplosives					
	Other:					
	Other:					
	Other:					
	Other:					

Date	Time 24 hr	DTW(ft)	Eh(mV)	pH (SU)	Cond (mS/cm)	Turb (ntu)	DO (ppm)	Temp	Volume
10/17/00	1020	NA	NA	7.30	0.166	0	6.96	18.2	30 gal
	1027	NA	NA	7.48	0.163	0	8.04	17.0	44 gal
	1030	NA	NA	7.49	0.165	0	7.98	17.3	4/ gals
	1034	NA	NA	7.50	0.164	0	8.82	17.2	60 gals
	1037	NA	NA	7.54	0.160	0	7.72	16.9	70 gals
	1042	NA	NA	7.53	0.162	0	7.26	17.2	87 gals
	1048	NA	NA	7.58	0.158	0	~~8.78~~ 8.57	17.1	107
	1052			7.54	0.159	0	9.73	17.1	122
	1056	NA	NA	7.56	0.159	0	9.84	17.1	~~137~~
	1101	NA	NA	7.54	0.160	0	9.70	17.0	154 gals

Logged BY/Date: _____ Reviewed BY/Date: _____

INTERNATIONAL TECHNOLOGY CORPORATION

ENTERED BY SHIRLEY

Sample Collection Log

Project: Fort McClellan, SAD TERC
Manager: Jeanne Yacoub

Site: WSW-SOTS-ADM
Location Code:
Sample Number:
Sample Name: XQ3002
Sampling Method: Dedicated pump

RFA/COC Number: ~~[illegible]~~ WSW-SOTS-EMAX
Collection Date: 10/17/00
Collection Time: 1210
Start Depth: NA
End Depth: NA

Sample Team: J. Brow
T. Rice

Check	Analytical Suite	Qty	Size	Units	Type	TCLP (Y/N)
	Volatiles	3	40	mL	VOA Vial	
	Semivolatiles	1	1	L	Amb. Glass	
	Metals	1	1	L	HDPE	
	PCBs	1	1	L	Amb. Glass	
	Cl Pesticides	1	1	L	Amb. Glass	
	Cl Herbicides	1	1	L	Amb. Glass	
	OP Pesticides	1	1	L	Amb. Glass	
	Reactive Cyanide	1	1	L	Amb. Glass	
	Reactive Sulfide	1	1	L	Amb. Glass	
	pH	1	1	L	Amb. Glass	
	Flashpoint	1	1	L	Amb. Glass	
	Other:					
	Other:					
	Other:					
	Other:					
	Other:					

Date	Time 24 hr	DTW(ft)	Eh(mV)	pH (SU)	Cond	Turb (ntu)	DO (ppm)	Temp	Volume
10/17/00	1142	NA	NA	7.60	0.176	0	5.94	20°C	10gal
	1147	NA	NA	7.63	0.176	0	5.87	21.2°C	20gal
	1150	NA	NA	7.63	0.176	0	7.23	19.7	30gal
	1157	NA	NA	7.64	0.174	0	6.75	20.4	45
	1201	NA	NA	7.67	0.176	0	6.71	20.0	55
	1207	NA	NA	7.66	0.175	0	4.57	20.0	68

Logged BY/Date: _____ Reviewed BY/Date: D.E.K. 10-20-00

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: 796887 Fort McClellan

Manager: Jeanne Yacoub

RFA / COC Number: ~~No COC~~ WSW-021403-EMAX

Location Code: WSW-~~SOTS-ADM~~ FMR-SOTS QTW 5/15/03
Sample Number: XQ3024
Sample Name: WSW-~~SOTS-ADM~~ FMR-SOTS GW-XQ3024-REG QTW 5/15/03
Sampling Method: SP
Sample Type: GW *Sample Purpose:* REG

Collection Date: 13-FEB-03
Collection Time: 16:35
Start Depth: 0
End Depth: 0
Sample Matrix: WATER
Sample Team: OA

Containers

Analytical Suite	Flt	Frtn	Qty	Size	Units	Type
METALS-W	N	C	1	1	L	HDPE

ERPIMS Values:
Sacode:
Lot Control#:

Comments:

SOTS Supply Well

Sample pH Tested to less than 2.

6" well
PID 0.0

Sketch Location:

Depth to water (DTW) - 68.52' BTOC
Total Depth (TD) - - -177.50' BTOC K.H. 2/17/03
Water Column (WC) - - 108.98' BTOC K.H. 2/17/03
(1) Purge Volume (PV) - 16~~1.63~~ 2.38 gallons
(3) Purge Volumes (PV) - 484.2 gallons

TD' - DTW' = WC' x 1.49 = (1) PV
(6" well)

Logged BY / Date: 2-13-03 *Reviewed BY / Date:* 2/14/03

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: 796886 **Fort McClellan**

Manager: Jeanne Yacoub

Location Code: ~~OLF-G40~~ WSW ~~SOTS-ADMRW~~ FMR-SOTS 5/15/03

Sample Number: ~~PE3165~~ XQ3024

PURGE RECORD:

Initial	Time(24hr)	DepthtoWater (ft)	Eh (mV)	pH (SU)	Conductivity (mS/cm)	Turbidity (NTU)	DissOxygen mg/L ~~(ppm)~~	Temperature (C)	Purge Volume Ø (gal)
	1210	68.52							
OKA	1230	68.96	-92.4	6.38	0.189	130	0.30	18.62	30 @ 1.5 gpm
	1250	69.07	-106.9	6.45	0.209	38	0.11	18.60	68 @ 1.9 gpm
	1320	69.10	-93.8	6.63	0.368	20	0.05	18.52	125
	1350	69.11	-38.1	6.65	0.372	28	0.28	18.41	182
	1420	69.12	22.4	6.70	0.361	24	1.90	18.24	239
	1450	69.12	26.7	6.77	0.355	15.5	2.33	18.17	296
	1520	69.13	25.1	6.78	0.341	11.3	3.12	18.02	353
	1550	69.13	24.6	6.76	0.335	8.7	3.56	18.17	410
	1620	69.13	25.0	6.77	0.325	5.9	4.29	18.20	467
	1625	69.14	27.7	6.75	0.322	5.1	4.28	18.19	476.5
	1630	69.14	23.4	6.79	0.321	5.1	4.23	18.13	486
Sample:									

Reduced Purge rate to .5 gpm. Collected sample @ 1635 hrs

Logged BY / Date: 2-13-03 *Reviewed BY / Date:* 2/17/03

INTERNATIONAL TECHNOLOGY CORPORATION

ENTERED BY SHIRLEY

Sample Collection Log

Project: Fort McClellan, SAD TERC
Manager: Jeanne Yacoub

Site: SOTS Technical
Location Code: WSW-FMR-SOTS
Sample Number: ~~XQ3004~~ XQ3005
Sample Name:
Sampling Method:

SOTS TACTICAL SITE

RFA/COC Number: WSW-SOTS2 EMAX
Collection Date: 10/18/00
Collection Time: 1545
Start Depth: NA
End Depth: NA

Sample Team: J. Brown
T. Tice

Check	Analytical Suite	Qty	Size	Units	Type	TCLP (Y/N)
✓	Volatiles	3	40	ml	VOA Vial	
✓	Semivolatiles	1	1	L	Amb. Glass	
✓	Metals	1	1	L	HDPE	
	PCBs	1	1	L	Amb. Glass	
	Cl Pesticides	1	1	L	Amb. Glass	
	Cl Herbicides	1	1	L	Amb. Glass	
	OP Pesticides	1	1	L	Amb. Glass	
	Reactive Cyanide	1	1	L	Amb. Glass	
	Reactive Sulfide	1	1	L	Amb. Glass	
	pH	1	1	L	Amb. Glass	
	Flashpoint	1	1	L	Amb. Glass	
✓	Other:					Nitroaromatics
	Other:					
	Other:					
	Other:					
	Other:					

Date	Time 24 hr	DTW(ft)	Eh(mV)	pH (SU)	Cond	Turb (ntu)	DO (ppm)	Temp	Volume
10/18	~~1450~~ 1550	NA	NA	6.55	0.228	38	6.34	19.8	10 gals
	1458	NA	NA	6.64	0.228	59	5.93	19.4	18
	1506	NA	NA	6.71	0.227	241	7.47	19.3	36*
	1512	NA	NA	6.76	0.224	206	7.24	19.0	57
	1518	NA	NA	~~6.92~~ 6.76	0.224	206	7.24	19.0	78
	1524	NA	NA	6.78	0.231	416	6.55	19.0	99
	1530	NA	NA	6.77	0.232	466	6.94	18.7	120
	1536	NA	NA	6.78	0.233	428	5.61	18.8	141*
	1542	NA	NA	6.80	0.231	344	9.92	18.8	162

Logged BY/Date: 10/18/00 Reviewed BY/Date: OK 10/20/00

* Increased volume outtake to 3.5 gals/min

INTERNATIONAL TECHNOLOGY CORPORATION

Sample Collection Log

Project: Fort McClellan, SAD TERC
Manager: Jeanne Yacoub

Site:
Location Code: WSW-RIDEOUT
Sample Number: x0.3003
Sample Name:
Sampling Method: Designated pump

RFA/COC Number:
Collection Date: 10/17/00
Collection Time: 14:30
Start Depth: NA
End Depth: NA

Sample Team: J. Brow
T. Rice

Check	Analytical Suite	Qty	Size	Units	Type	TCLP (Y/N)
	[redacted]					

Date	Time 24 hr	DTW(ft)	Eh(mV)	pH (SU)	Cond	Turb (ntu)	DO (ppm)	Temp	Volume
10/17/00	1320	NA	NA	7.28	0.158	34	3.04	19.5	15 gal
	1325	NA	NA	7.26	0.160	222	12.72	18.0	30 gal *
	1328	NA	NA	6.97	0.146	99	6.03	17.4	33 gal *
	1332	NA	NA	7.09	0.146	116	7.02	17.6	45 gal *
	1334	NA	NA	7.06	0.149	65	8.38	17.4	48 gal *
	1340	NA	NA	7.09	0.150	62	7.30	17.6	58 gal *
	1345	NA	NA	7.23	0.166	66	5.25	17.5	68 gal *
	1352	well	has gone dry						

Logged BY/Date: _____ Reviewed BY/Date: _____

* A switch to a 2" PVC pipe was turned on to make the pump in the well turn on continuously. So, flow is high and unknown.

Final readings 1435 7.11pH, 0.150 mS, 63 NTUs, 7.60 DO, 18.5°C.

ANALYSIS REQUEST/CHAIN-OF-CUSTODY RECORDS

SDG #00J139 Cl/WA4 00J139

IT CORPORATION
A Member of The IT Group

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: WSW-SOTS-EMAX

Project Number: 773019
Project Name: Fort McClellan
Sample Coordinator: Oliver Allen
Turnaround Time: NORMAL

Samples Shipment Date: 17 OCT 2000
Lab Destination: EMAX Laboratories, Inc.
Lab Contact: Elizabeth McIntyre
Project Contact: Randy McBride
Carrier/Waybill No.: Fed Ex/ 790383101917 790386514 14 7918 7564 7112

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions: NONE

Possible Hazard Indentification:
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☑

Sample Disposal:
Return to Client ☐ Disposal by Lab ☑ Archive (mos.)

1. Relinquished By (Signature/Affiliation) IT Corp	Date: 10/17/00 Time: 1700
1. Received By (Signature/Affiliation)	Date: 10-18-00 Time: 10:00 AM
2. Relinquished By (Signature/Affiliation)	Date: Time:
2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:
3. Received By (Signature/Affiliation)	Date: Time:

Comments: NONE

Cooler-1: T = 2.2
Cooler-2: T = 2.7
Cooler-3: T = 2.5

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
101700-TB	FIELDQC-BW-101700-TB-TB	17 OCT 2000	16:00	40 ml VOA VIAL	3	HCl<pH 2	Volatiles by 8260B	N		
XQ3002	WSW-SOTS-ADM-GW-XQ3002-REG	17 OCT 2000	12:10	40 ml VOA VIAL	3	HCl<pH 2	Volatiles by 8260B	N		
XQ3002	WSW-SOTS-ADM-GW-XQ3002-REG	17 OCT 2000	12:10	1 L Amb. Glass	2	None except cool to 4 C	Semivolatiles by 8270C	N		
XQ3002	WSW-SOTS-ADM-GW-XQ3002-REG	17 OCT 2000	12:10	1 L HDPE	1	HNO3<pH 2	TAL Metals by 6010B/7470A - Water	N		
XQ3002	WSW-SOTS-ADM-GW-XQ3002-REG	17 OCT 2000	12:10	1 L Amb. Glass	2	None except cool to 4 C	Nitroaromatics by 8330	N		

21003

SDG#00J 139 C1 (WA4) 00J139

IT CORPORATION

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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: WSW-RNG-57

Page 1 of 1

Project Number: 773019

Project Name: Fort McClellan

Sample Coordinator: Oliver Allen

Turnaround Time:

Samples Shipment Date: 17 OCT 2000

Lab Destination: EMAX Laboratories, Inc.

Lab Contact: Elizabeth McIntyre

Project Contact: Randy McBride

Carrier/Waybill No.: Fed Ex/ 7903 8310 1917 7903 8665 1414 7918 7564 7112

Bill To: Duane Nielsen, 312 Directors Drive, Knoxville TN 37923

Report To: Duane Nielsen, 312 Directors Drive, Knoxville TN 37923

Special Instructions: NONE

Possible Hazard Indentification: Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal: Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

1. Relinquished By (Signature/Affiliation)	[signature] IT Corp	Date: 10/17/00 Time: 1700	1. Received By (Signature/Affiliation)	[signature]	Date: 10-18-00 Time: 10:[illegible]
2. Relinquished By (Signature/Affiliation)		Date: Time:	2. Received By (Signature/Affiliation)		Date: Time:
3. Relinquished By (Signature/Affiliation)		Date: Time:	3. Received By (Signature/Affiliation)		Date: Time:

Comments: NONE

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
XQ3001	WSW-RNG-57-GW-XQ3001-REG	17 OCT 2000	11:05	40 ml VOA VIAL	3	HCl<pH 2	Volatiles by 8260B	N		
XQ3001	WSW-RNG-57-GW-XQ3001-REG	17 OCT 2000	11:05	1 L Amb. Glass	2	None except cool to 4 C	Semivolatiles by 8270C	N		
XQ3001	WSW-RNG-57-GW-XQ3001-REG	17 OCT 2000	11:05	1 L HDPE	1	HNO3<pH 2	TAL Metals by 6010B/7470A - Water	N		
XQ3001	WSW-RNG-57-GW-XQ3001-REG	17 OCT 2000	11:05	1 L Amb. Glass	2	None except cool to 4 C	Nitroaromatics by 8330	N		

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1004

SDG# 00J139

Cl/WA4 00J139

IT CORPORATION
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ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: WSW-RIDEOUT-EMAX

Project Number: 773019
Project Name: Fort McClellan
Sample Coordinator: Oliver Allen
Turnaround Time:

Samples Shipment Date: 17 OCT 2000
Lab Destination: EMAX Laboratories, Inc.
Lab Contact: Elizabeth McIntyre
Project Contact: Randy McBride
Carrier/Waybill No.: Fed Ex/ 790383101917
790386514 14
791875647112

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions: NONE

Possible Hazard Indentification:
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal:
Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

1. Relinquished By (Signature/Affiliation) IT Corp	Date: 10/17/00 Time: 1700	1. Received By (Signature/Affiliation)	Date: 10-18-00 Time: 10:00
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:	3. Received By (Signature/Affiliation)	Date: Time:

Comments: NONE

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
XQ3003	WSW-RIDEOUT-GW-XQ3003-REG	17 OCT 2000	14:30	40 ml VOA VIAL	3	HCl<pH 2	Volatiles by 8260B	N		
XQ3003	WSW-RIDEOUT-GW-XQ3003-REG	17 OCT 2000	14:30	1 L Amb. Glass	2	None except cool to 4 C	Semivolatiles by 8270C	N		
XQ3003	WSW-RIDEOUT-GW-XQ3003-REG	17 OCT 2000	14:30	1 L HDPE	1	HNO3<pH 2	TAL Metals by 6010B/7470A - Water	N		
XQ3003	WSW-RIDEOUT-GW-XQ3003-REG	17 OCT 2000	14:30	1 L Amb. Glass	2	None except cool to 4 C	Nitroaromatics by 8330	N		

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IT CORPORATION
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SDG #00J139 F2/VB4 00J157

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: WSW-SOTS2-EMAX

Page 1 of 1

Project Number: 773019
Project Name: Fort McClellan
Sample Coordinator: Oliver Allen
Turnaround Time: NORMAL

Samples Shipment Date: 18 OCT 2000
Lab Destination: EMAX Laboratories, Inc.
Lab Contact: Elizabeth McIntyre
Project Contact: Randy McBride
Carrier/Waybill No.: Fed Ex/ 790384188293

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Special Instructions: NONE

Possible Hazard Indentification:
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☒

Sample Disposal:
Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

1. Relinquished By (Signature/Affiliation) IT Corp	Date: 10/18/00 Time: 1700	1. Received By (Signature/Affiliation)	Date: 10-19-00 Time: 12:00 noon.
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation)	Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:	3. Received By (Signature/Affiliation)	Date: Time:

Comments: NONE

T=3.8

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
101800-TB	FIELDQC-BW-101800-TB-TB	18 OCT 2000	16:30	40 ml VOA VIAL	3	HCl<pH 2	Volatiles by 8260B	N		
XQ3005	WSW-FMR-SOTS-GW-XQ3005-REG	18 OCT 2000	15:45	40 ml VOA VIAL	3	HCl<pH 2	Volatiles by 8260B	N		
XQ3005	WSW-FMR-SOTS-GW-XQ3005-REG	18 OCT 2000	15:45	1 L Amb. Glass	2	None except cool to 4 C	Semivolatiles by 8270C	N		
XQ3005	WSW-FMR-SOTS-GW-XQ3005-REG	18 OCT 2000	15:45	1 L HDPE	1	HNO3<pH 2	TAL Metals by 6010B/7470A - Water	N		
XQ3005	WSW-FMR-SOTS-GW-XQ3005-REG	18 OCT 2000	15:45	1 L Amb. Glass	2	None except cool to 4 C	Nitroaromatics by 8330	N		

1
2
90 OT

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03B118

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: SOTS-021403-EMAX

Page 1 of 1

Project Number: 773019

Project Name: Fort McClellan SAD TERC

Sample Coordinator: Oliver Allen

Turnaround Time: Normal

Samples Shipment Date: 14 FEB 2003

Lab Destination: EMAX Laboratories, Inc.

Lab Contact: Elizabeth McIntyre

Project Contact: Tim Roth

Carrier/Waybill No.: UPS/

Bill To: Duane Nielsen
312 Directors Drive
Knoxville TN 37923

Report To:
Anniston AL

Special Instructions: None

Possible Hazard Indentification: Radiological ☐
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☑

Sample Disposal:
Return to Client ☐ Disposal by Lab ☒ Archive (mos.)

1. Relinquished By (Signature/Affiliation)	Date: 2/14/03 Time: 1600	1. Received By (Signature/Affiliation) Date: 2-15-03 Time: 0945
2. Relinquished By (Signature/Affiliation)	Date: Time:	2. Received By (Signature/Affiliation) Date: Time:
3. Relinquished By (Signature/Affiliation)	Date: Time:	3. Received By (Signature/Affiliation) Date: Time:

IT Corp.

Comments: None

T = 2.8 °C

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Fil	CID	Condition On Receipt
XQ3024	WSW-SOTS-ADM-GW-XQ3024-REG	13 FEB 2003	16:35	1 L HDPE	1	HNO3<pH 2	TAL Metals by 6010B/7470A - Water	N		

Note: Sample name prefix incorrectly assigned. The correct designation is WSW-FMR-SOTS, which is the well at the actual SOTS facility.
QTW 5/19/03

1001

APPENDIX B

WELL DEVELOPMENT LOG FOR SOTS WELL RESAMPLE

Groundwater Well Development Log

Fort McClellan , Alabama

Project Number:
Form Completed by: O. Allen
Well Developed by (person/firm): O. Allen / L. Flippin (SHAW)

Parcel No.: RNG - 102
Well No.: SOTS Supply Well
Date started: 1-29-03

Monitoring Well Information

Development Method: Purge
Development Equipment: Grundfos, DTW Meter, YSI-556 DRT-ISCE
Casing Diameter: 6"

Beginning Measurments
Depth to Water (ft): 71.30' BTOC
Total depth of Well (ft): 177.50' BTOC

Time 24hr	Purge Volume (gal)	Water Level (ft) (TOC)	pH (std units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/L)	Temperature (°C)	Clarity (color)	Comments (Date if different from start date) (Purge Rate, Pump Position, Misc.)
0845	0	71.30							
08:50	5	71.71	6.57	0.360	271.0	0.30	17.60	Rusty/Orgn cloudy	1.0 Pump @ 170' BTOC
09:05	20	71.68	6.57	0.363	193.0	0.77	17.73	"	1.0 "
09:35	50	71.79	6.57	0.363	231.0	1.12	17.68	"	1.0 "
10:05	80	71.76	6.61	0.363	151.0	1.15	17.69	"	1.0 "
10:35	116	71.76	6.60	0.357	125.0	1.54	17.75	"	1.2 "
11:05	152	71.77	6.49	0.355	541.0	0.40	17.87	"	1.2 Pump @ 100' BTOC
11:35	191	71.85	6.49	0.357	395.0	0.37	17.86	"	1.3

TD - DTW = WC x ~~2"/4"~~ 6" well = One PV x 5 = Min PV + H20 to install well = Minimum H20 to remove

177.5' - 71.3' = 106.2' x 1.5 = 159.3 x 5 = 796.5 + 0 = 796.5 gal

cc'd 3/4/03

Parcel No.: RNG-102
Well ID: SOTS Supply Well
Date: 1-29-03

Time 24hr	Purge Volume (gal)	Water Level (ft) (TOC)	pH (std units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/L)	Temperature (°C)	Clarity (color)	Comments (Date if different from start date)
12:05	230.0	71.86	6.50	0.349	214	0.42	17.78	Rusty/org cloudy	1.3 Pump @ 100' BTOC
12:35	269.0	71.85	6.54	0.342	137	1.69	17.70	Rusty/org clearing	1.3
13:05	308.0	71.86	6.56	0.332	83.7	2.41	17.61	clear	1.3
13:35	347.0	71.84	6.66	0323	51.4	3.23	17.34	"	1.3
14:05	386.0	71.84	6.37	0.246	66.4	0.34	17.26	"	1.3 Pump @ 80' BTOC
14:35	425.0	71.81	6.45	0.306	60.8	1.25	17.63	"	1.3
15:05	464.0	71.91	6.55	0.311	30.2	2.92	17.64	"	1.5
15:35	509.0	71.92	6.67	0.308	22.9	3.70	17.70	"	1.5
16:05	554.0	71.92	6.66	0.306	19.7	4.07	17.69	"	1.5
07:50	554.0	START Purging			1-30-03		DTW 70.86		PID 0.0
07:55	561.5	71.14	6.65	0.285	30.1	1.45	17.42	clear	1.5 Pump @ 80' BTOC
08:25	606.5	71.22	6.75	0.327	18.9	1.54	17.64	"	1.5 "

Parcel No.: RNG-102
Well ID: SOTO Supply well
Date: 1-30-03

Time 24hr	Purge Volume (gal)	Water Level (ft) (TOC)	pH (std units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved oxygen (mg/L)	Temperature (°C)	Clarity (color)	Comments (Date if different from start date)
08 :55	651.5	71.23	6.84	0.317	16.7	2.51	17.60	clear	1.5
09 :25	696.5	71.23	6.88	0.311	11.8	2.92	17.60	clear	1.5
09 :55	741.5	71.24	6.87	0.318	8.80	2.41	17.60	clear	1.5
10 :10	764.0	71.24	6.83	0.316	4.83	2.28	17.68	clear	1.5
10 :25	786.5	71.24	6.86	0.315	3.87	2.48	17.68	clear	1.5
10 :40	819.0	71.24	6.84	0.313	3.21	2.51	17.63	clear	1.5
— : —	NTU & Vol Purged Levels Met --					Photo	Sample	Taken	—
:									
:									
:			OK.C						
:					1-30-03				
:									

APPENDIX C

SURVEY DATA

Appendix C

Survey Data
Water Supply Wells at Pelham Range
Fort McClellan, Calhoun County, Alabama

Sample Location	Northing	Easting
WSW-FMR-SOTS	1171303.91	617117.81
WSW-RIDEOUT	1176317.42	607888.50
WSW-RNG-57	1170398.09	637569.07
WSW-SOTS-ADM	1180820.89	624986.87
WSW-UTES	1173444.54	635730.55

Horizontal coordinates referenced to the U.S. State Plane Coordinate System, Alabama East Zone, North American Datum of 1983 (NAD83).

WSW-Rideout - Water supply well at Rideout Hall, Building 8801.
WSW-RNG-57 - Water supply well at Range 57.
WSW-SOTS-ADM - Water supply well at SOTS Administration Building, Building 8203.
WSW-FMR-SOTS - Water supply well at former SOTS facility (actual test site).

APPENDIX D

SUMMARY OF VALIDATED ANALYTICAL DATA

Summary of Validated Groundwater Analytical Data
Water Supply Wells, Pelham Range
Fort McClellan, Alabama

Report Date: 05/15/03

	Location Code:	WSW-FMR-SOTS			WSW-FMR-SOTS			WSW-RIDEOUT			WSW-RNG-57		
	Associated Site:	WSW			WSW			WSW			WSW		
	Sample No:	XQ3005			XQ3024			XQ3003			XQ3001		
	Sample Date:	18-OCT-00			13-FEB-03			17-OCT-00			17-OCT-00		
User Test Group / Lab Method / Parameter	Flt / Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
METALS													
SW6010B													
Aluminum	mg/L	.0887	J	J	.2	U	U	.2	U	U	.2	U	U
Antimony	mg/L	.1	U	U	.1	U	U	.1	U	U	.1	U	U
Arsenic	mg/L	.453			.0118			.01	U	U	.01	U	U
Barium	mg/L	.0565			.0313			.451			.00603	J	J
Beryllium	mg/L	.001	U	U	.01	U	U	.001	U	U	.001	U	U
Cadmium	mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Calcium	mg/L	36.2			42.1			32.1			31.7		
Chromium	mg/L	.01	U	U	.02	U	U	.01	U	U	.01	U	U
Cobalt	mg/L	.02	U	U	.02	U	U	.02	U	U	.02	U	U
Copper	mg/L	.157			.02	U	U	.008	J	J	.02	U	U
Iron	mg/L	25.5			.582	J	J	5.7			.035	J	J
Lead	mg/L	.00856	J	B	.01	U	U	.01	U	U	.00967	J	B
Magnesium	mg/L	23.5			20			9.96			19.3		
Manganese	mg/L	.414			.0733	J	J	.428			.01	U	U
Nickel	mg/L	.02	U	U	.02	U	U	.0106	J	J	.02	U	U
Potassium	mg/L	5	U	U	.789	J	B	5	U	U	5	U	U
Selenium	mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Silver	mg/L	.01	U	U	.02	U	U	.01	U	U	.01	U	U
Sodium	mg/L	1.8			.881	J	J	7.53			1.12		
Thallium	mg/L	.01	U	U	.01	U	U	.01	U	U	.01	U	U
Vanadium	mg/L	.01	U	U	.02	U	U	.01	U	U	.01	U	U
Zinc	mg/L	.781			.0409	J	J	.731			.0107	J	B
SW7470A													
Mercury	mg/L	.0005	U	U	.0005	U	U	.0005	U	U	.0005	U	U
NITROAROMATICS													
SW8330													
1,3,5-Trinitrobenzene	mg/L	.0004	U	U				.0004	U	U	.0004	U	U
1,3-Dinitrobenzene	mg/L	.0004	U	U				.0004	U	U	.0004	U	U
2,4,6-Trinitrotoluene	mg/L	.0004	U	U				.0004	U	U	.0004	U	U
2,4-Dinitrotoluene	mg/L	.0004	U	U				.0004	U	U	.0004	U	U

Location Code:	WSW-SOTS-ADM
Associated Site:	WSW
Sample No:	XQ3002
Sample Date:	17-OCT-00

User Test Group / Lab Method / Parameter	*Flt*	*Units*	*Result*	*Qual*	*VQual*
METALS					
SW6010B					
Aluminum		mg/L	.2	U	U
Antimony		mg/L	.1	U	U
Arsenic		mg/L	.01	U	U
Barium		mg/L	.00502	J	J
Beryllium		mg/L	.001	U	U
Cadmium		mg/L	.01	U	U
Calcium		mg/L	32.7		
Chromium		mg/L	.01	U	U
Cobalt		mg/L	.02	U	U
Copper		mg/L	.00734	J	J
Iron		mg/L	.0172	J	J
Lead		mg/L	.00691	J	B
Magnesium		mg/L	20		
Manganese		mg/L	.01	U	U
Nickel		mg/L	.02	U	U
Potassium		mg/L	5	U	U
Selenium		mg/L	.01	U	U
Silver		mg/L	.01	U	U
Sodium		mg/L	.893	J	J
Thallium		mg/L	.00614	J	J
Vanadium		mg/L	.01	U	U
Zinc		mg/L	.433		
SW7470A					
Mercury		mg/L	.0005	U	U
NITROAROMATICS					
SW8330					
1,3,5-Trinitrobenzene		mg/L	.0004	U	U
1,3-Dinitrobenzene		mg/L	.0004	U	U
2,4,6-Trinitrotoluene		mg/L	.0004	U	U
2,4-Dinitrotoluene		mg/L	.0004	U	U

Summary of Validated Groundwater Analytical Data
Water Supply Wells, Pelham Range
Fort McClellan, Alabama

Report Date: 05/15/03

User Test Group / Lab Method / Parameter	Flt	Units	Location Code: WSW-FMR-SOTS Associated Site: WSW Sample No: XQ3005 Sample Date: 18-OCT-00 Result	Qual	VQual	Location Code: WSW-FMR-SOTS Associated Site: WSW Sample No: XQ3024 Sample Date: 13-FEB-03 Result	Qual	VQual	Location Code: WSW-RIDEOUT Associated Site: WSW Sample No: XQ3003 Sample Date: 17-OCT-00 Result	Qual	VQual	Location Code: WSW-RNG-57 Associated Site: WSW Sample No: XQ3001 Sample Date: 17-OCT-00 Result	Qual	VQual
NITROAROMATICS														
SW8330														
2,6-Dinitrotoluene		mg/L	.0004	U	U				.0004	U	U	.0004	U	U
2-Amino-4,6-dinitrotoluene		mg/L	.0004	U	U				.0004	U	U	.0004	U	U
2-Nitrotoluene		mg/L	.0004	U	U				.0004	U	U	.0004	U	U
3-Nitrotoluene		mg/L	.0004	U	U				.0004	U	U	.0004	U	U
4-Amino-2,6-dinitrotoluene		mg/L	.0004	U	U				.0004	U	U	.0004	U	U
HMX		mg/L	.001	U	U				.001	U	U	.001	U	U
Nitrobenzene		mg/L	.0004	U	U				.0004	U	U	.0004	U	U
RDX		mg/L	.0004	U	U				.0004	U	U	.0004	U	U
Tetryl		mg/L	.0004	U	U				.0004	U	U	.0004	U	U
p-Nitrotoluene		mg/L	.0004	U	U				.0004	U	U	.0004	U	U
SEMIVOLATILES														
SW8270C														
1,2,4-Trichlorobenzene		mg/L	.011	U	U				.0097	U	U	.0094	U	U
1,2-Dichlorobenzene		mg/L	.011	U	U				.0097	U	U	.0094	U	U
1,3-Dichlorobenzene		mg/L	.011	U	U				.0097	U	U	.0094	U	U
1,4-Dichlorobenzene		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2,4,5-Trichlorophenol		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2,4,6-Trichlorophenol		mg/L	.027	U	U				.024	U	U	.024	U	U
2,4-Dichlorophenol		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2,4-Dimethylphenol		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2,4-Dinitrophenol		mg/L	.027	U	U				.024	U	U	.024	U	U
2,4-Dinitrotoluene		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2,6-Dinitrotoluene		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2-Chloronaphthalene		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2-Chlorophenol		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2-Methylnaphthalene		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2-Methylphenol		mg/L	.011	U	U				.0097	U	U	.0094	U	U
2-Nitroaniline		mg/L	.027	U	U				.024	U	U	.024	U	U
2-Nitrophenol		mg/L	.011	U	U				.0097	U	U	.0094	U	U
3,3'-Dichlorobenzidine		mg/L	.027	U	U				.024	U	U	.024	U	U

Location Code:	WSW-SOTS-ADM
Associated Site:	WSW
Sample No:	XQ3002
Sample Date:	17-OCT-00

User Test Group / Lab Method / Parameter	*Flt*	*Units*	*Result*	*Qual*	*VQual*
NITROAROMATICS					
SW8330					
2,6-Dinitrotoluene		mg/L	.0004	U	U
2-Amino-4,6-dinitrotoluene		mg/L	.0004	U	U
2-Nitrotoluene		mg/L	.0004	U	U
3-Nitrotoluene		mg/L	.0004	U	U
4-Amino-2,6-dinitrotoluene		mg/L	.0004	U	U
HMX		mg/L	.001	U	U
Nitrobenzene		mg/L	.0004	U	U
RDX		mg/L	.0004	U	U
Tetryl		mg/L	.0004	U	U
p-Nitrotoluene		mg/L	.0004	U	U
SEMIVOLATILES					
SW8270C					
1,2,4-Trichlorobenzene		mg/L	.0095	U	U
1,2-Dichlorobenzene		mg/L	.0095	U	U
1,3-Dichlorobenzene		mg/L	.0095	U	U
1,4-Dichlorobenzene		mg/L	.0095	U	U
2,4,5-Trichlorophenol		mg/L	.0095	U	U
2,4,6-Trichlorophenol		mg/L	.024	U	U
2,4-Dichlorophenol		mg/L	.0095	U	U
2,4-Dimethylphenol		mg/L	.0095	U	U
2,4-Dinitrophenol		mg/L	.024	U	U
2,4-Dinitrotoluene		mg/L	.0095	U	U
2,6-Dinitrotoluene		mg/L	.0095	U	U
2-Chloronaphthalene		mg/L	.0095	U	U
2-Chlorophenol		mg/L	.0095	U	U
2-Methylnaphthalene		mg/L	.0095	U	U
2-Methylphenol		mg/L	.0095	U	U
2-Nitroaniline		mg/L	.024	U	U
2-Nitrophenol		mg/L	.0095	U	U
3,3'-Dichlorobenzidine		mg/L	.024	U	U

Summary of Validated Groundwater Analytical Data
Water Supply Wells, Pelham Range
Fort McClellan, Alabama

Report Date: 05/15/03

	Location Code:	WSW-FMR-SOTS			WSW-FMR-SOTS			WSW-RIDEOUT			WSW-RNG-57		
	Associated Site:	WSW			WSW			WSW			WSW		
	Sample No:	XQ3005			XQ3024			XQ3003			XQ3001		
	Sample Date:	18-OCT-00			13-FEB-03			17-OCT-00			17-OCT-00		
User Test Group / Lab Method / Parameter	Flt / Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
SEMIVOLATILES													
SW8270C													
3-Nitroaniline	mg/L	.027	U	U				.024	U	U	.024	U	U
4,6-Dinitro-2-methylphenol	mg/L	.027	U	U				.024	U	U	.024	U	U
4-Bromophenyl phenyl ether	mg/L	.011	U	U				.0097	U	U	.0094	U	U
4-Chloro-3-methylphenol	mg/L	.011	U	U				.0097	U	U	.0094	U	U
4-Chloroaniline	mg/L	.011	U	U				.0097	U	U	.0094	U	U
4-Chlorophenyl phenyl ether	mg/L	.011	U	U				.0097	U	U	.0094	U	U
4-Methylphenol	mg/L	.011	U	U				.0097	U	U	.0094	U	U
4-Nitroaniline	mg/L	.011	U	U				.0097	U	U	.0094	U	U
4-Nitrophenol	mg/L	.027	U	U				.024	U	U	.024	U	U
Acenaphthene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Acenaphthylene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Anthracene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Benzo(a)anthracene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Benzo(a)pyrene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Benzo(b)fluoranthene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Benzo(ghi)perylene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Benzo(k)fluoranthene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Bis(2-Chloroethoxy)methane	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Bis(2-Chloroethyl)ether	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Bis(2-Chloroisopropyl)ether	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Bis(2-Ethylhexyl)phthalate	mg/L	.011	U	U				.0097	U	U	.0048	J	J
Butyl benzyl phthalate	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Carbazole	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Chrysene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Di-n-butyl phthalate	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Di-n-octyl phthalate	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Dibenz(a,h)anthracene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Dibenzofuran	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Diethyl phthalate	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Dimethyl phthalate	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Fluoranthene	mg/L	.011	U	U				.0097	U	U	.0094	U	U

Location Code:	WSW-SOTS-ADM
Associated Site:	WSW
Sample No:	XQ3002
Sample Date:	17-OCT-00

User Test Group / Lab Method / Parameter	*Flt*	*Units*	*Result*	*Qual*	*VQual*
SEMIVOLATILES					
SW8270C					
3-Nitroaniline		mg/L	.024	U	U
4,6-Dinitro-2-methylphenol		mg/L	.024	U	U
4-Bromophenyl phenyl ether		mg/L	.0095	U	U
4-Chloro-3-methylphenol		mg/L	.0095	U	U
4-Chloroaniline		mg/L	.0095	U	U
4-Chlorophenyl phenyl ether		mg/L	.0095	U	U
4-Methylphenol		mg/L	.0095	U	U
4-Nitroaniline		mg/L	.0095	U	U
4-Nitrophenol		mg/L	.024	U	U
Acenaphthene		mg/L	.0095	U	U
Acenaphthylene		mg/L	.0095	U	U
Anthracene		mg/L	.0095	U	U
Benzo(a)anthracene		mg/L	.0095	U	U
Benzo(a)pyrene		mg/L	.0095	U	U
Benzo(b)fluoranthene		mg/L	.0095	U	U
Benzo(ghi)perylene		mg/L	.0095	U	U
Benzo(k)fluoranthene		mg/L	.0095	U	U
Bis(2-Chloroethoxy)methane		mg/L	.0095	U	U
Bis(2-Chloroethyl)ether		mg/L	.0095	U	U
Bis(2-Chloroisopropyl)ether		mg/L	.0095	U	U
Bis(2-Ethylhexyl)phthalate		mg/L	.0095	U	U
Butyl benzyl phthalate		mg/L	.0095	U	U
Carbazole		mg/L	.0095	U	U
Chrysene		mg/L	.0095	U	U
Di-n-butyl phthalate		mg/L	.0095	U	U
Di-n-octyl phthalate		mg/L	.0095	U	U
Dibenz(a,h)anthracene		mg/L	.0095	U	U
Dibenzofuran		mg/L	.0095	U	U
Diethyl phthalate		mg/L	.0095	U	U
Dimethyl phthalate		mg/L	.0095	U	U
Fluoranthene		mg/L	.0095	U	U

Summary of Validated Groundwater Analytical Data
Water Supply Wells, Pelham Range
Fort McClellan, Alabama

Report Date: 05/15/03

	Location Code:	WSW-FMR-SOTS			WSW-FMR-SOTS			WSW-RIDEOUT			WSW-RNG-57		
	Associated Site:	WSW			WSW			WSW			WSW		
	Sample No:	XQ3005			XQ3024			XQ3003			XQ3001		
	Sample Date:	18-OCT-00			13-FEB-03			17-OCT-00			17-OCT-00		
User Test Group / Lab Method / Parameter	Flt / Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
SEMIVOLATILES													
SW8270C													
Fluorene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Hexachlorobenzene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Hexachlorobutadiene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Hexachlorocyclopentadiene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Hexachloroethane	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Indeno(1,2,3-cd)pyrene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Isophorone	mg/L	.011	U	U				.0097	U	U	.0094	U	U
N-Nitroso-di-n-propylamine	mg/L	.011	U	U				.0097	U	U	.0094	U	U
N-Nitrosodiphenylamine	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Naphthalene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Nitrobenzene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Pentachlorophenol	mg/L	.027	U	U				.024	U	U	.024	U	U
Phenanthrene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Phenol	mg/L	.011	U	U				.0097	U	U	.0094	U	U
Pyrene	mg/L	.011	U	U				.0097	U	U	.0094	U	U
VOLATILES													
SW8260B													
1,1,1,2-Tetrachloroethane	mg/L	.005	U	U				.005	U	U	.005	U	U
1,1,1-Trichloroethane	mg/L	.005	U	U				.005	U	U	.005	U	U
1,1,2,2-Tetrachloroethane	mg/L	.005	U	U				.005	U	U	.005	U	U
1,1,2-Trichloroethane	mg/L	.005	U	U				.005	U	U	.005	U	U
1,1-Dichloroethane	mg/L	.005	U	U				.005	U	U	.005	U	U
1,1-Dichloroethene	mg/L	.005	U	U				.005	U	U	.005	U	U
1,1-Dichloropropene	mg/L	.005	U	U				.005	U	U	.005	U	U
1,2,3-Trichlorobenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
1,2,3-Trichloropropane	mg/L	.005	U	U				.005	U	U	.005	U	U
1,2,4-Trichlorobenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
1,2,4-Trimethylbenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
1,2-Dibromo-3-Chloropropane	mg/L	.01	U	U				.01	U	U	.01	U	U
1,2-Dibromoethane	mg/L	.005	U	U				.005	U	U	.005	U	U

	Location Code:	Associated Site:	Sample No:	Sample Date:
	WSW-SOTS-ADM	WSW	XQ3002	17-OCT-00

User Test Group / Lab Method / Parameter	Flt	Units	Result	Qual	VQual
SEMIVOLATILES					
SW8270C					
Fluorene		mg/L	.0095	U	U
Hexachlorobenzene		mg/L	.0095	U	U
Hexachlorobutadiene		mg/L	.0095	U	U
Hexachlorocyclopentadiene		mg/L	.0095	U	U
Hexachloroethane		mg/L	.0095	U	U
Indeno(1,2,3-cd)pyrene		mg/L	.0095	U	U
Isophorone		mg/L	.0095	U	U
N-Nitroso-di-n-propylamine		mg/L	.0095	U	U
N-Nitrosodiphenylamine		mg/L	.0095	U	U
Naphthalene		mg/L	.0095	U	U
Nitrobenzene		mg/L	.0095	U	U
Pentachlorophenol		mg/L	.024	U	U
Phenanthrene		mg/L	.0095	U	U
Phenol		mg/L	.0095	U	U
Pyrene		mg/L	.0095	U	U
VOLATILES					
SW8260B					
1,1,1,2-Tetrachloroethane		mg/L	.005	U	U
1,1,1-Trichloroethane		mg/L	.005	U	U
1,1,2,2-Tetrachloroethane		mg/L	.005	U	U
1,1,2-Trichloroethane		mg/L	.005	U	U
1,1-Dichloroethane		mg/L	.005	U	U
1,1-Dichloroethene		mg/L	.005	U	U
1,1-Dichloropropene		mg/L	.005	U	U
1,2,3-Trichlorobenzene		mg/L	.005	U	U
1,2,3-Trichloropropane		mg/L	.005	U	U
1,2,4-Trichlorobenzene		mg/L	.005	U	U
1,2,4-Trimethylbenzene		mg/L	.005	U	U
1,2-Dibromo-3-Chloropropane		mg/L	.01	U	U
1,2-Dibromoethane		mg/L	.005	U	U

Summary of Validated Groundwater Analytical Data
Water Supply Wells, Pelham Range
Fort McClellan, Alabama

Report Date: 05/15/03

	Location Code:	WSW-FMR-SOTS			WSW-FMR-SOTS			WSW-RIDEOUT			WSW-RNG-57		
	Associated Site:	WSW			WSW			WSW			WSW		
	Sample No:	XQ3005			XQ3024			XQ3003			XQ3001		
	Sample Date:	18-OCT-00			13-FEB-03			17-OCT-00			17-OCT-00		
User Test Group / Lab Method / Parameter	Flt / Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
VOLATILES													
SW8260B													
1,2-Dichlorobenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
1,2-Dichloroethane	mg/L	.005	U	U				.005	U	U	.005	U	U
1,2-Dichloropropane	mg/L	.005	U	U				.005	U	U	.005	U	U
1,2-Dimethylbenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
1,3,5-Trimethylbenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
1,3-Dichlorobenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
1,3-Dichloropropane	mg/L	.005	U	U				.005	U	U	.005	U	U
1,4-Dichlorobenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
2-Butanone	mg/L	.02	U	U				.02	U	U	.02	U	U
2-Hexanone	mg/L	.02	U	U				.02	U	U	.02	U	U
4-Methyl-2-pentanone	mg/L	.01	U	U				.01	U	U	.01	U	U
Acetone	mg/L	.02	U	U				.02	U	U	.02	U	U
Benzene	mg/L	.005	U	U				.005	U	U	.005	U	U
Bromobenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
Bromochloromethane	mg/L	.005	U	U				.005	U	U	.005	U	U
Bromodichloromethane	mg/L	.005	U	U				.005	U	U	.005	U	U
Bromoform	mg/L	.005	U	U				.005	U	U	.005	U	U
Bromomethane	mg/L	.005	U	U				.005	U	U	.005	U	U
Carbon disulfide	mg/L	.005	U	U				.005	U	U	.005	U	U
Carbon tetrachloride	mg/L	.005	U	U				.005	U	U	.005	U	U
Chlorobenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
Chloroethane	mg/L	.005	U	U				.005	U	U	.005	U	U
Chloroform	mg/L	.0013	J	J				.005	U	U	.005	U	U
Chloromethane	mg/L	.005	U	U				.005	U	U	.005	U	U
Cis-1,2-Dichloroethene	mg/L	.005	U	U				.005	U	U	.005	U	U
Cis-1,3-Dichloropropene	mg/L	.005	U	U				.005	U	U	.005	U	U
Cumene	mg/L	.005	U	U				.005	U	U	.005	U	U
Dibromochloromethane	mg/L	.005	U	U				.005	U	U	.005	U	U
Dibromomethane	mg/L	.005	U	U				.005	U	U	.005	U	U
Dichlorodifluoromethane	mg/L	.005	U	U				.005	U	U	.005	U	U
Ethylbenzene	mg/L	.005	U	U				.005	U	U	.005	U	U

	Location Code:	WSW-SOTS-ADM
	Associated Site:	WSW
	Sample No:	XQ3002
	Sample Date:	17-OCT-00

User Test Group / *Lab Method* / *Parameter*	*Flt*	*Units*	*Result*	*Qual*	*VQual*
VOLATILES					
SW8260B					
1,2-Dichlorobenzene		mg/L	.005	U	U
1,2-Dichloroethane		mg/L	.005	U	U
1,2-Dichloropropane		mg/L	.005	U	U
1,2-Dimethylbenzene		mg/L	.005	U	U
1,3,5-Trimethylbenzene		mg/L	.005	U	U
1,3-Dichlorobenzene		mg/L	.005	U	U
1,3-Dichloropropane		mg/L	.005	U	U
1,4-Dichlorobenzene		mg/L	.005	U	U
2-Butanone		mg/L	.02	U	U
2-Hexanone		mg/L	.02	U	U
4-Methyl-2-pentanone		mg/L	.01	U	U
Acetone		mg/L	.02	U	U
Benzene		mg/L	.005	U	U
Bromobenzene		mg/L	.005	U	U
Bromochloromethane		mg/L	.005	U	U
Bromodichloromethane		mg/L	.005	U	U
Bromoform		mg/L	.005	U	U
Bromomethane		mg/L	.005	U	U
Carbon disulfide		mg/L	.005	U	U
Carbon tetrachloride		mg/L	.005	U	U
Chlorobenzene		mg/L	.005	U	U
Chloroethane		mg/L	.005	U	U
Chloroform		mg/L	.005	U	U
Chloromethane		mg/L	.005	U	U
Cis-1,2-Dichloroethene		mg/L	.005	U	U
Cis-1,3-Dichloropropene		mg/L	.005	U	U
Cumene		mg/L	.005	U	U
Dibromochloromethane		mg/L	.005	U	U
Dibromomethane		mg/L	.005	U	U
Dichlorodifluoromethane		mg/L	.005	U	U
Ethylbenzene		mg/L	.005	U	U

Summary of Validated Groundwater Analytical Data
Water Supply Wells, Pelham Range
Fort McClellan, Alabama

Report Date: 05/15/03

	Location Code:	WSW-FMR-SOTS			WSW-FMR-SOTS			WSW-RIDEOUT			WSW-RNG-57		
	Associated Site:	WSW			WSW			WSW			WSW		
	Sample No:	XQ3005			XQ3024			XQ3003			XQ3001		
	Sample Date:	18-OCT-00			13-FEB-03			17-OCT-00			17-OCT-00		
User Test Group / Lab Method / Parameter	Flt / Units	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual	Result	Qual	VQual
VOLATILES													
SW8260B													
Hexachlorobutadiene	mg/L	.005	U	U				.005	U	U	.005	U	U
Methylene chloride	mg/L	.005	U	U				.005	U	U	.005	U	U
N-Butylbenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
N-Propylbenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
Naphthalene	mg/L	.005	U	U				.005	U	U	.005	U	U
Styrene	mg/L	.005	U	U				.005	U	U	.005	U	U
Tetrachloroethene	mg/L	.005	U	U				.005	U	U	.005	U	U
Toluene	mg/L	.005	U	U				.005	U	U	.005	U	U
Trans-1,2-Dichloroethene	mg/L	.005	U	U				.005	U	U	.005	U	U
Trans-1,3-Dichloropropene	mg/L	.005	U	U				.005	U	U	.005	U	U
Trichloroethene	mg/L	.005	U	U				.005	U	U	.005	U	U
Trichlorofluoromethane	mg/L	.005	U	U				.005	U	U	.005	U	U
Vinyl chloride	mg/L	.005	U	U				.005	U	U	.005	U	U
m,p-Xylenes	mg/L	.01	U	U				.01	U	U	.01	U	U
o-Chlorotoluene	mg/L	.005	U	U				.005	U	U	.005	U	U
p-Chlorotoluene	mg/L	.005	U	U				.005	U	U	.005	U	U
p-Cymene	mg/L	.005	U	U				.005	U	U	.005	U	U
sec-Butylbenzene	mg/L	.005	U	U				.005	U	U	.005	U	U
sec-Dichloropropane	mg/L	.005	U	U				.005	U	U	.005	U	U
tert-Butylbenzene	mg/L	.005	U	U				.005	U	U	.005	U	U

Location Code:	WSW-SOTS-ADM
Associated Site:	WSW
Sample No:	XQ3002
Sample Date:	17-OCT-00

User Test Group / Lab Method / Parameter	*Flt*	*Units*	*Result*	*Qual*	*VQual*
VOLATILES					
SW8260B					
Hexachlorobutadiene		mg/L	.005	U	U
Methylene chloride		mg/L	.005	U	U
N-Butylbenzene		mg/L	.005	U	U
N-Propylbenzene		mg/L	.005	U	U
Naphthalene		mg/L	.005	U	U
Styrene		mg/L	.005	U	U
Tetrachloroethene		mg/L	.005	U	U
Toluene		mg/L	.005	U	U
Trans-1,2-Dichloroethene		mg/L	.005	U	U
Trans-1,3-Dichloropropene		mg/L	.005	U	U
Trichloroethene		mg/L	.005	U	U
Trichlorofluoromethane		mg/L	.005	U	U
Vinyl chloride		mg/L	.005	U	U
m,p-Xylenes		mg/L	.01	U	U
o-Chlorotoluene		mg/L	.005	U	U
p-Chlorotoluene		mg/L	.005	U	U
p-Cymene		mg/L	.005	U	U
sec-Butylbenzene		mg/L	.005	U	U
sec-Dichloropropane		mg/L	.005	U	U
tert-Butylbenzene		mg/L	.005	U	U